



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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January 26, 2001

## CERTIFIED RETURN RECEIPT

7000 0520 0021 7582 8456

Kevin Ovard  
Holnam, Inc.  
6055 East Croydon Road  
Morgan, Utah 84050

Re: Initial Review of Application to Revise Large Mining Operation Permit, Holnam, Inc. Devils Slide Mine, M/029/001, Morgan County, Utah

Dear Mr. Ovard:

The Division has completed the review of your application to revise the Devils Slide large mine permit, located in Morgan County, Utah, which was received October 25, 2000. After reviewing the application, the Division has the following comments which will need to be addressed before tentative approval may be granted. Because this permit revision references portions of the original Devils Slides Reclamation Plan filed on May 19, 1987, a review of that document was also performed. The review revealed that the reclamation and operating plan does not sufficiently describe the present operation or the effort necessary for reclamation of the disturbed areas.

*A meeting was held January 24, 2001, at 1:00 p.m. in our office to discuss our draft technical review comments and the need to update plans. During this meeting, you expressed some urgency to complete this plan revision to allow construction to begin this Spring. Therefore, we agreed to process the revision application separately from any changes that may be necessary to update the approved mine plan. With this arrangement, the Division could allow Holnam to move forward with utilization of the new area covered by the revision once it is approved. Any required changes/updates to the present approved plan will take place following our acceptance of the mine plan revision.*

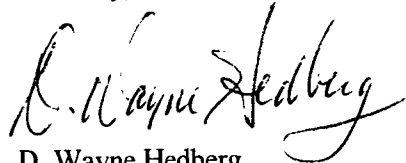
*One of the changes that will take place will be the inclusion of this revision into the original mine plan. The Division requests that when the new aerial survey is flown this Spring, the updated disturbed area map include the entire 390 acres of affected area. The plant site and the 6 acre pelletizing area, near the plant, should also be included in this survey and shown on the updated map. All disturbed areas at the site should be clearly outlined and described. This highlighting can be similar to map # dcc-1340a which was submitted as a part of the 1977-1984 Annual Report and Request for Amendment for the Devils Slide plant.*

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Kevin Ovard  
M/029/001  
January 26, 2001

Our review comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. If possible, please provide a response to this review by March 5, 2001.

The Division will suspend further review of this revision until your response to this letter is received. If you have any questions in this regard please contact me, Lynn Kunzler, Tom Munson or Doug Jensen of the Minerals Staff.

Sincerely,

A handwritten signature in cursive script, reading "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor  
Minerals Regulatory Program

jb  
Attachment: Review  
cc: Mary Ann Wright, DOGM  
M29-01-rvw

## **REVIEW OF NOTICE OF INTENTION TO REVISE LARGE MINING OPERATIONS**

**Holnam Inc.  
Devils Slide Mine**

**M/029/001  
January 26, 2001**

### **R647-4-104 - Filing Requirements and Review Procedures**

The permit for the Devils Slide Quarry was issued on December 3, 1987, since that time the bond amount has only been escalated to reflect inflation. Normally the Division reviews a large mine permit every five years to address changes in the operation which would necessitate a change to the reclamation surety amount.

This notice has been categorized as a permit revision to the original approved large mining notice. A number of technical deficiencies have been identified. When these deficiencies have been satisfied, a tentative approval finding will be made by the Division. A formal Notice of Tentative Approval publication will then be published by the Division which begins a 30-day public comment period.  
(DJ)

### **R647-4-105 - Maps, Drawings & Photographs**

#### **105.1 Topographic base map, boundaries, pre-act disturbance**

The 7.5 minute quadrangle map included with the application is insufficient. The scale is too small to discern features within the area of the mine. Please submit a map with a scale of 1"=500' or larger. (DJ)

#### **105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)**

The Plan view drawing in the recent submittal is unclear as to what areas will be filled in with mining waste. The cross sections show more area will be filled than what is shaded on the plan view drawing. Please revise these drawings, to more clearly identify the areas to be affected.  
(TM)

### **R647-4-106 - Operation Plan**

#### **106.2 Type of operations conducted, mining method, processing etc.**

The submission states that slopes will be spread and contoured is ambiguous. Please clarify this statement by describing which slopes will be affected and how they will be contoured, along with slope angles, etc., needed to complete this task. (DJ)

#### **106.3 Estimated acreages disturbed, reclaimed, annually.**

The disturbed acreage to be bonded and reclaimed in this revision will need to be the entire affected area of 187.5 acres. Although 14.6 acres of this revision falls into the affected area of Holnam's existing permit area, the reclamation of this acreage is not presently covered by the existing bond. The surety for this revision will need to include the reclamation of this 14.6 acre disturbance. (DJ)

106.5 Existing soil types, location, amount

The submission states that, "No suitable soil material is projected for salvage from the proposed overburden dump areas." However, Soil descriptions submitted with the original NOI as well as the photos submitted with the latest revision suggest that there is suitable soil materials that should be salvaged.

Before any disturbance will be allowed in the proposed waste dump area, the amount of suitable material will need to be verified and plans to salvage and stockpile all suitable material will need to be submitted and approved. Samples of the soil material will need to be sent to a soils lab for analysis to determine suitability. The analysis will need to include at a minimum, ph, % organic matter, electrical conductivity (EC), SAR, Cation Exchange Capacity (CEC), total nitrogen, nitrate nitrogen, phosphorus (as  $P_2O_5$ ) and potassium (as  $K_2O$ ).

A site visit after spring snowmelt will need to be arranged to accomplish this. These plans must include the volume of material to be salvaged, the location and size of all soil material stockpiles, how the soil material will be protected so that it is available for reclamation and how soil material will be redeposited for reclamation (including depth of replacement). If there are areas where the soil materials are not suitable, or could reasonably be amended so that they were suitable, a variance will need to be requested and approved to not salvage soil from those areas. The area for which the variance is requested will also need to be clearly labeled and outlined on a reclamation treatments map. (LK)

106.6 Plan for protecting & redepositing soils

Please refer to comments made under R647-4-106.5 (LK)

106.7 Existing vegetation - species and amount

The submission refers to the vegetation survey in appendix H of the original NOI to describe the vegetation that will be affected by the new waste dump. However, photos provided of the proposed waste dump area do not show the same vegetation communities as described in appendix H. Therefore, it will be necessary to have a vegetation survey completed in the vegetation types that will be affected by the proposed waste dump. The survey needs to include the plant species present and the percent of ground covered by the aerial projection of the vegetation. The survey should be planned for June - July/2001. (LK)

106.9 Location & size of ore, waste, tailings, ponds

Please show the location of the stock water pond as shown in the photograph on the appropriate drawing/map. (TM)

**R647-4-107 - Operation Practices**

107.2 Drainages to minimize damage

No plans are given or designs included for drainage channels, although it appears that the runoff occurs in response to snow melt and severe thunder storms and is ephemeral in nature. What downstream controls will exist in Quarry Hollow or Cottonwood Canyon to prevent the downstream migration of sediments during construction. (TM)

107.3 Erosion control & sediment control

Please update your mine plan to show the location of all sediment and erosion control structures on an appropriately scaled surface facilities map. (TM)

107.5 Suitable soils removed & stored

Please refer to comments made under R647-4-106.5 (LK)

107.6 Concurrent reclamation

Will the waste dump be constructed such that certain portions will be completed and could therefore be reclaimed prior to the total dump being completed? (LK)

**R647-4-109 - Impact Assessment**

109.3 Impacts on existing soils resources

This section has not been addressed. Please refer to comments made under R647-4-106.5. (LK)

109.4 Slope stability, erosion control, air quality, safety

It is important to provide a demonstration of onsite erosional stability through the application of current practices of surface roughness, slope breaks, etc. Please provide this demonstration. (TM)

**R647-4-110 - Reclamation Plan**

110.5 Revegetation planting program

The plant species proposed for revegetation in the original NOI are appropriate for this amendment. However, there are additional species that should be added to improve the reclaimed areas for the approved post mining land use (wildlife habitat and grazing). Also, the original proposed seeding rates are considered excessive. Attached to this review is a seed mix that includes the recommended changes. If this mix is acceptable, please acknowledge your acceptance in writing. The original NOI calls for the use of approximately 140 lbs/acre of fertilizer and the use of 1500 lbs of mulch. This may not be necessary. Also, 6 inches of soil material over the waste dump may or may not be adequate. A final decision cannot be made until the soil resources information (See R647-4-106.5) is resolved. (LK)

**R647-4-111 - Reclamation Practices**

111.1 Public safety & welfare

1.14 Posting warning signs

Please post appropriate signs to warn the public of the hazards that will be encountered within the affected area. These signs should be posted at entrances to the permitted areas. (DJ)

111.2 Reclamation of natural channels

Nothing has been provided in the plan regarding location and sizing of reclaimed channels other than a statement that the drainage will be routed off the dump face. Please provide the necessary detail to describe how drainage will be routed off the dump face, i.e., location of channel and sizing of channel handle the expected flows. This detail should provide an estimate of the watershed area contributing to this reclaimed drainage. (TM)

111.3 Erosion & sediment control

Please provide the necessary information to explain how reclaimed areas will satisfy erosion and offsite sedimentation concerns following reclamation. (TM)

111.9 Dams & impoundments left self-draining & stable

Any dams or impoundments left following reclamation must address concerns related to final reclamation and their disposition regarding final post-mining land use. (TM)

111.12 Topsoil redistribution

See comments under R647-4-110.5. (LK)

**R647-4-112 - Variance**

The application requests the same variance as the original operating permit which exempts the operator from including rock outcrops in the reclamation plan. The variance was granted under Rule M-10(12) when the original permit was issued in 1987. The variance that was granted stated: "Won't seed rock outcrops" and the narrative stated that following operations, "all disturbed areas except the solid outcrops will be shaped and seeded. The soils are good in this area, and there is over fifteen inches of precipitation, so revegetation will not be difficult."

The variance approved in 1987 applies only to that specific portion of the permit for which it was issued. Variances are not automatically extended to changes or amendments to the original large mine permit application. Additional variances must include sufficient justification before they will be granted. Since the waste dump is not considered a rock outcrop, the previously approved variance would not apply. If you believe that a variance to a particular reclamation practice(s) is appropriate for the waste dump, please provide all the information required under R647-4-112, including, but not limited to: the rule(s) to which the variance is requested, identification of the area to which the variance will apply, justification for the variance, and proposed alternative methods or measures to be utilized to assure that the proposal will be consistent with the Act. (DJ & LK)

**R647-4-113 - Surety**

The cost of recontouring and application of topsoil (if a variance for this activity is not issued), over the area covered by this application will need to be included in the surety. An operator's projections for third party costs will be considered when calculating this surety. Copies of contractor's bid should be submitted with the application. (DJ)

Recommended Revegetation Species List  
for

**Holnam, Inc.**  
**Devil's Slide Plant**  
**M/029/001**  
January 26, 2001

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
Tall wheatgrass	<u>Agropyron elongatum</u>	1.0
Bluebunch wheatgrass	<u>Agropyron spicatum</u>	2.0
'Piute' orchard grass	<u>Dactylis glomerata 'piute'</u>	0.5
'Magnar' Basin Wildrye	<u>Elymus cinereus 'magnar'</u>	2.0
'Ephraim' Crested wheatgrass	<u>Agropyron cristatum 'ephrain'</u>	0.5
Ladac Alfalfa	<u>Medicago sativa</u>	0.5
Yellow sweetclover	<u>Melilotus officinalis</u>	0.5
Palmer penstemon	<u>Penstemon palmerii</u>	0.5
Small burnet	<u>Sanguisorba minor</u>	1.5
Mountain big sagebrush	<u>Artemisia tridentata vaseyana</u>	0.1
Rubber Rabbitbrush	<u>Chrysothamnus nauseosus</u>	0.25
Forage kochia	<u>Kochia prostrata</u>	0.5
Bitterbrush	<u>Purshia tridentata</u>	1.0
<b>Total</b>		<b>10.85 lbs/ac</b>

\*This the recommended broadcast seeding rate.